



ASHA
Speech-Language Pathology
The Largest Association of
Speech-Language Pathology
Professionals

SLP HEALTH CARE 2019 SURVEY

Survey Methodology, Respondent Demographics, and Glossary

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Executive Summary

The American Speech-Language-Hearing Association (ASHA) conducted a survey of speech-language pathologists (SLPs) in the spring of 2019. We designed the survey to provide information about health care-based service delivery and to update and expand information gathered during previous SLP Health Care Surveys. We have presented the results in a series of reports.

We drew data from six types of health care facilities: general medical, Veterans Affairs (VA), and long-term acute care (LTAC) hospitals; home health agencies or clients' homes; outpatient clinics or offices; pediatric hospitals; rehabilitation (rehab) hospitals; and skilled nursing facilities (SNFs).

Highlights

- ◆ 50% was the response rate.
- ◆ 33% of the respondents were employed in outpatient clinics or offices.
- ◆ 70% of SLPs worked full time.
- ◆ Mean number of years of experience was 16; the median was 13.
- ◆ 2% held a doctoral degree.
- ◆ Across settings, 90%–94% of SLPs were employed as clinical service providers.
- ◆ 85% of SLPs in SNFs received an hourly wage.
- ◆ 39% of SLPs worked in the South.
- ◆ 44% of SLPs worked in urban areas.

Survey Methodology

Stratified Random Sample

We fielded the *ASHA 2019 SLP Health Care Survey* to a stratified, random sample of 4,500 ASHA-certified SLPs who were employed full time or part time in health care settings in the United States. We stratified the sample by type of facility and by participation in private practice. We drew disproportional random samples from each facility from among SLPs who did *not* work in private practice (7%–16%) and from those who *did* work in private practice (6%–91%), oversampling small groups like pediatric hospitals (see Table 1).

Facility	Private Practice	Population	Sample
General Medical/Veterans Affairs (VA)/long-term acute care (LTAC) hospital	Yes	702	200
	No	9,595	650
Rehabilitation (rehab) hospital	Yes	226	180
	No	3,652	400
Pediatric hospital	Yes	165	150
	No	1,830	300
Skilled nursing facility (SNF)	Yes	639	200
	No	10,383	700
Home health/clients' homes	Yes	2,473	320
	No	4,555	400
Outpatient clinic or office	Yes	9,247	600
	No	4,250	400
Total		47,717	4,500

On February 11, 2019, we emailed a be-on-the-lookout (BOLO) message to the 4,500 sample members asking them to check their postal mailboxes in the coming week for the survey. We mailed the survey on February 13 and removed individuals who returned their surveys from second (March 20) and third (April 17) mailings. Each mailing consisted of a personalized cover letter, a numbered survey, and a #10 postage-paid business return envelope inserted into a #11 window envelope with an ASHA return address.

Each survey had 35 questions on 25.5 in. × 11 in. white paper, folded to 8.5 in. × 11 in. and printed in a format of two columns per page on five pages. We used Arial 11-point font. The sixth page contained information about ASHA Connect 2019, a thank you note, contact information should respondents have questions about the survey instrument, and a web address to access results.

Experimental Design

We designed an experiment to test whether the degree of formality of the cover letter signatures would effect response rates. The control group consisted of 2,250 members of the sample who were randomly selected from each of the 12 groups described in Table 1. They received cover letters with the full signature of the Association’s chief executive officer. The experimental group consisted of the remaining 2,250 members of the sample, and they received cover letters with only the sender’s first name signed.

Response Rates

Of the original 4,500 SLPs in the sample, 67 were ineligible. The number of respondents was 2,232, resulting in a 50.3% response rate (see Table 2). The type of signature in the cover letters did not effect response rates.

Table 2: Response Rate, by Experimental Design

Disposition	Total	Control: Full Signature	Experimental: First Name
Original (gross) sample size	4,500	2,250	2,250
Undeliverable mailing address	14	8	6
Ineligible: retired	2	2	0
Ineligible: other reasons	51	19	32
Net sample size	4,433	2,221	2,212
Number of respondents*	2,232	1,111	1,116
Response rate	50.3	50.0%	50.4%

**Note.* An additional 5 respondents removed their identification numbers, making it impossible to determine which group they were assigned to.

Data Entry

To ensure the highest quality data reasonably possible, the ASHA staff member with primary responsibility for the survey checked each of the 2,232 completed surveys and corrected or deleted erroneous responses. We then sent the surveys to an outside firm for two-pass (key and verify) data entry. We completed this process by June 6, 2019.

Demo- graphics

Not only is it typically the case that some individuals who receive a survey do not complete it (unit nonresponse), it is likewise true that some who return their surveys do not answer every question (item nonresponse) and thus do not qualify for inclusion in portions of a report. The survey originator may exclude these individuals from analyses because they did not answer a question at all or because their answer disqualified them (e.g., stating that they were employed part time when a particular analysis was limited to full-time employees). For example, 2,232 SLPs responded, but we reported on primary employment facility for only 2,147 (see Figure 1) because they did both of these things:

- Indicated that they worked full time or part time
- Notated the type of employment facility where they worked

As is our practice, we do not report data for categories with fewer than 25 respondents.

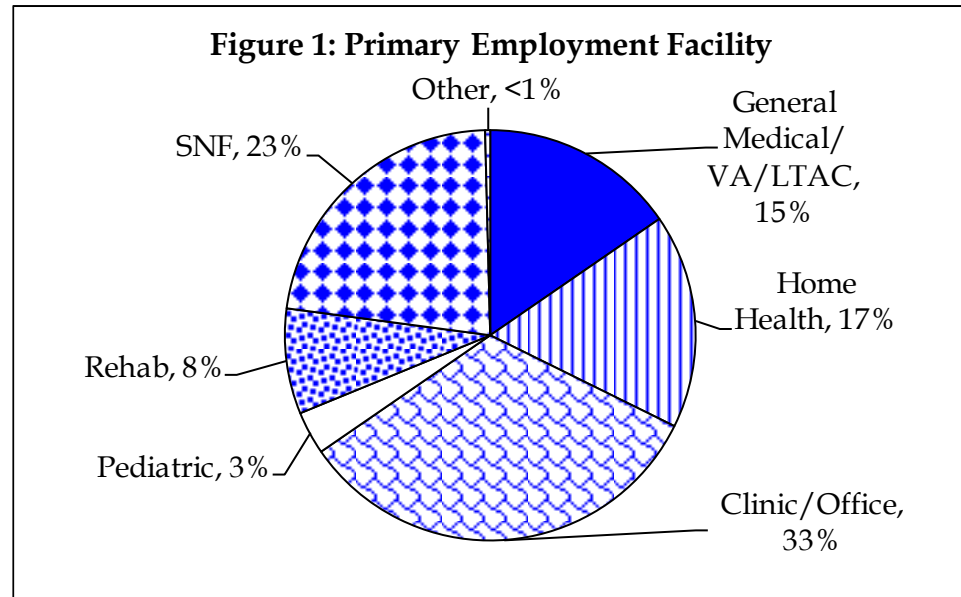
Respondents Versus Population

The closer the match between survey respondents and the population of ASHA health care–based SLPs from which they were drawn, the more validity there is in generalizing from the sample to the population—that is, the more truth there is in saying that the people who answered the survey questions represent the broader group from which they were selected. Demographic variables that appear in both the membership database and the survey include primary employment function, sex, highest earned degree, region of the country, and age. Primary employment facility and private practice status also appear in both databases but are not included in the comparison because the survey sample was stratified by oversampling and undersampling these variables (see Table 1). Table 3 shows the comparison for the five remaining characteristics that were available from both the membership database and the survey.

Characteristic	ASHA's Population	Survey Respondents
Clinical service provider	86%	90%
Female	96%	96%
Doctoral degree	2%	2%
Region of the country:		
Northeast	18%	18%
Midwest	23%	26%
South	42%	39%
West	17%	18%
Median age	40	40

Primary Employment Facility

Most of the respondents worked in outpatient clinics or offices (33%) and in SNFs (23%; see Figure 1). Because a disproportional random sample was drawn from each facility, this distribution does not reflect the distribution of SLPs within the Association.



Note. n = 2,147.

Excluding Other

We have included the 8 individuals who reported working in an *other* facility in the ASHA 2019 Health Care Survey Reports only as part of the total, not as a separate category of *facility*, because of the ambiguous nature of this small group of individuals. We also included, as part of the total throughout the report, the 27 respondents who were employed full or part time but who did not answer the question about their type of facility.

Private Practice Employment

The representation of private practice owners, co-owners, and employees in the ASHA 2019 Health Care Survey was higher than in the Association because they were oversampled for this survey. More than one quarter of the respondents said that they worked either full time (16%) or part time (13%) in private practice.

Employment Status

Of the SLPs in the survey who worked, 70% worked full time and 30% worked part time. SLPs in home health agencies or clients' homes were more likely than those in other types of facilities to work part time (42%), and SLPs in SNFs were more likely than SLPs in other types of facilities to work full time (80%; $p = .000$).

Years of Experience

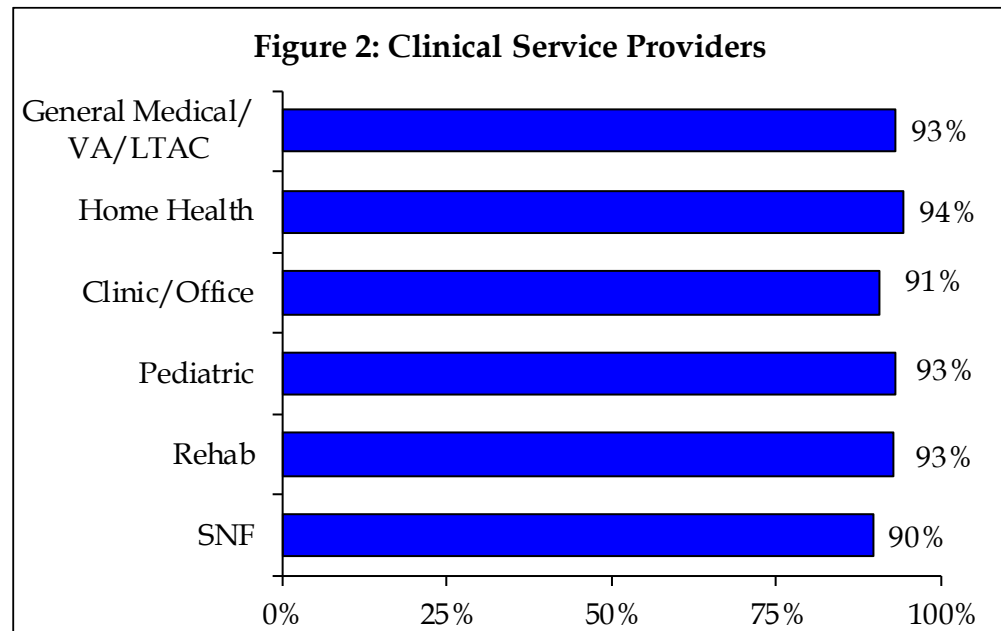
The median number of years of experience was 13, and the mean was 16. The median number of years ranged from 10 in pediatric hospitals to 15 in general medical, VA, or LTAC hospitals and home health agencies or clients' homes. Means were not statistically significant; that is, the type of facility where SLPs were employed did not effect the number of years of experience they reported ($p = .053$).

Highest Degree

Only 2% ($n = 50$) of the SLPs reported having received a doctoral degree. The type of facility where they worked did not effect their response ($p = .257$).

Primary Employment Function

Overall, 92% of respondents who were employed full- or part time were clinical service providers. (This figure is slightly different from the percentage reported in Table 1. Figure 2 was limited to SLPs who reported their function *and* their employment status, but Table 1 included responses to function *regardless* of employment status.) The type of facility where SLPs were employed did not effect the primary employment function reported by SLPs. The difference between 90% of SLPs in SNFs and 94% in home health agencies or clients' homes being clinical service providers is not statistically significant ($p = .123$).

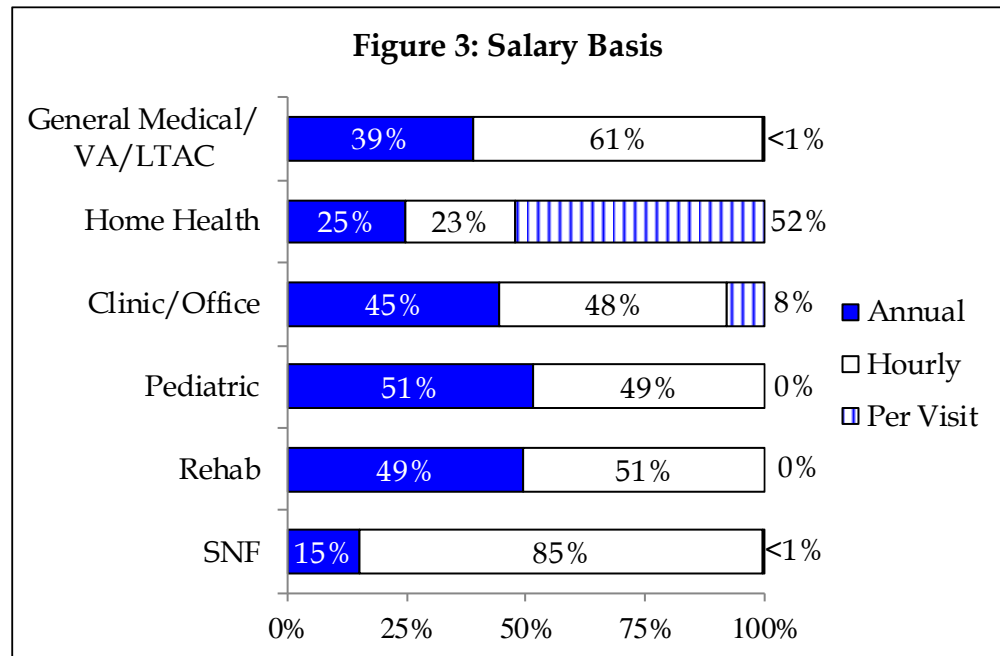


Note. $n = 2,084$.

Salary Basis

As a group, 54% of the SLPs received an hourly wage; 34%, an annual salary; and 12%, a per home-visit payment.

Individuals in pediatric hospitals were the most likely group to be paid an annual wage. More than half of the SLPs in general medical/VA/LTAC hospitals, rehab hospitals, and SNFs received an hourly wage. Slightly more than half of the SLPs in home health agencies or clients' homes received a per home-visit wage ($p = .000$; see Figure 3).

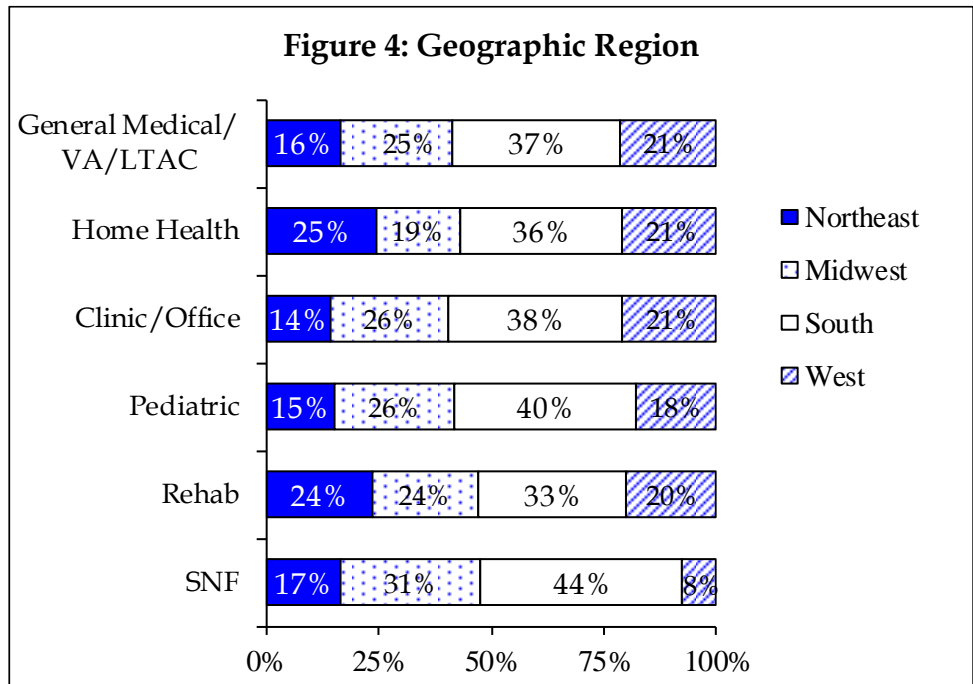


Note. $n = 2,118$.



Geographic Region

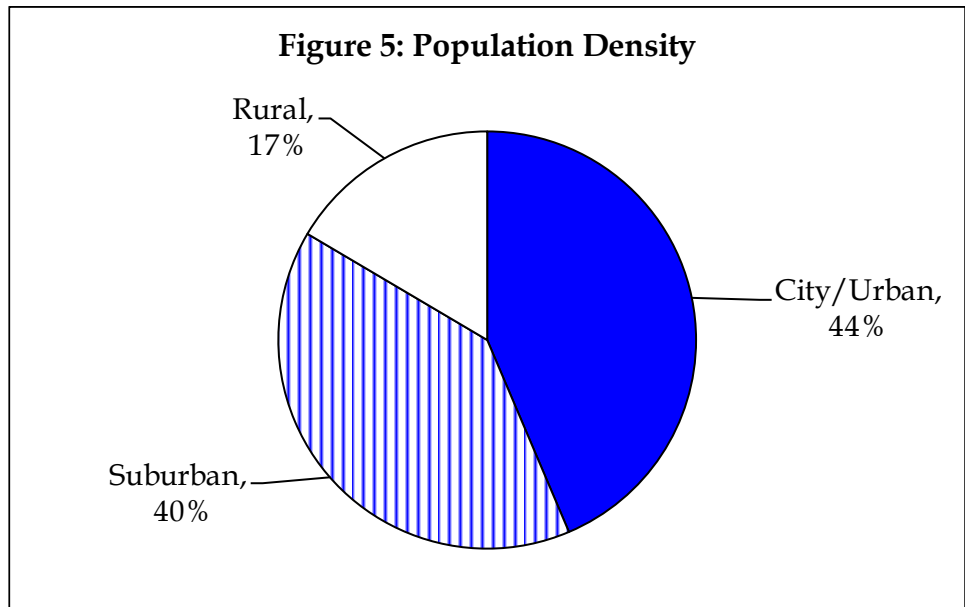
More than one third (39%) of the SLPs worked in the South. The rest were fairly evenly distributed, with 18% working in the Northeast and West and 26% working in the Midwest (not shown in any table). The region where SLPs worked varied by type of facility ($p = .000$; see Figure 4). See the state-by-state listings for each geographic region on page 11.



Note. $n \geq 2,129$.

Population Density

Most SLPs worked in either cities or suburbs, with a few in rural areas (see Figure 5). More than half of the SLPs in pediatric hospitals (78%), rehab hospitals (60%), and general medical/VA/LTAC hospitals (59%) worked in cities and urban areas. Nearly half of the SLPs in outpatient clinics or offices (46%), home health agencies or client’s homes (44%), and SNFs (42%) worked in suburban areas. The range in rural settings was from 1% of SLPs in pediatric hospitals to 25% in SNFs ($p = .000$; not shown in any table).



Note. $n = 2,103$.

Glossary

In this section, we include a glossary of terms used in the *ASHA 2019 SLP Health Care Survey Reports*.



Types of Facilities

Facility: General medical, Veterans Affairs (VA), or long-term acute care (LTAC) hospital
 Rehabilitation (rehab) hospital
 Pediatric hospital
 Skilled nursing facility (SNF)
 Home health agency or client's home
 Outpatient clinic or office
 Other

Respondents self-identified the primary employment facility from the list above.

Response Rate

The response rate was calculated using the following equation:

$$RR = \frac{(C + P)}{S - (Ret + I)}$$

where RR = Response rate
 C = Number of completed surveys
 P = Number of partial surveys
 S = Sample size
 Ret = Ineligible because of retirement
 I = Ineligible for other reasons (e.g., does not work in health care, no longer in the field, on leave of absence)

$$RR = \frac{2,232}{4,500 - (2 + 65)} = 50.3\%$$

Measures of Central Tendency

- n The number of items in a set
- Mean: Add the total of all values, and divide by n .
- Median: Arrange the values in order, from lowest to highest. Select the value in the middle position.
- Mode: The *mode* is the value that occurs more often than any other.

Example: Sample data set

1, 1, 7, 34, 88

Mean: $(1 + 1 + 7 + 34 + 88) / 5 = 26.2$

Median: 7

Mode: 1

Because medians are more stable and less sensitive to extreme values than are means, we use medians as the most commonly presented statistic in the *ASHA 2019 SLP Health Care Survey Reports*.



Regions of the Country

Northeast

- ◆ Middle Atlantic
 - New Jersey
 - New York
 - Pennsylvania
- ◆ New England
 - Connecticut
 - Maine
 - Massachusetts
 - New Hampshire
 - Rhode Island
 - Vermont

South

- ◆ East South Central
 - Alabama
 - Kentucky
 - Mississippi
 - Tennessee
- ◆ South Atlantic
 - Delaware
 - District of Columbia
 - Florida
 - Georgia
 - Maryland
 - North Carolina
 - South Carolina
 - Virginia
 - West Virginia
- ◆ West South Central
 - Arkansas
 - Louisiana
 - Oklahoma
 - Texas

Midwest

- ◆ East North Central
 - Illinois
 - Indiana
 - Michigan
 - Ohio
 - Wisconsin
- ◆ West North Central
 - Iowa
 - Kansas
 - Minnesota
 - Missouri
 - Nebraska
 - North Dakota
 - South Dakota

West

- ◆ Mountain
 - Arizona
 - Colorado
 - Idaho
 - Montana
 - Nevada
 - New Mexico
 - Utah
 - Wyoming
- ◆ Pacific
 - Alaska
 - California
 - Hawaii
 - Oregon
 - Washington

Survey Reports

We present results from the *ASHA 2019 SLP Health Care Survey* in a series of reports at www.asha.org:

- Survey Summary
- Caseload Characteristics
- Workforce
- Practice Issues
- Annual Salaries
- Hourly and Per Home-Visit Wages
- Survey Methodology, Respondent Demographics, and Glossary

Suggested Citation

American Speech-Language-Hearing Association. (2019). *ASHA 2019 SLP Health Care Survey: Survey methodology, respondent demographics, and glossary*. Retrieved from www.asha.org

Resources

Agresti, A., & Finlay, B. (2008). *Statistical methods for the social sciences* (4th ed.). Upper Saddle River, NJ: Pearson.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). New York, NY: Wiley.

Additional Information

For additional information regarding the *ASHA 2019 SLP Health Care Survey*, please contact Monica Sampson, director, Health Care Services in Speech-Language Pathology, 800-498-2071, ext. 5686, msampson@asha.org; or Rebecca Politis, associate director, Health Care Services in Speech-Language Pathology, 800-498-2071, ext. 5679, rpolitis@asha.org.

Thank You

ASHA would like to thank the SLPs who completed the *ASHA 2019 SLP Health Care Survey*. Reports like this one are possible only because people like *you* participate.

Is this information valuable to you? If so, please accept invitations to participate in other ASHA-sponsored surveys and focus groups. You are the experts, and we rely on you to provide data to share with your fellow members. ASHA surveys benefit *you*.